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COIN and

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COIN AND CURRENCY.

Paper Money in the United States.

The founders of the American Government were not friendly to government issues of paper money. A natural prejudice against them had been created in the public mind as the result of experience with the old Continental money, which, while it helped to win the independence of the United States, nevertheless had been a grievous thorn in the flesh of the believers in honest money of a century ago. It was not until eighty years after the Continental currency had disappeared from circulation that Government notes with legal tender functions were issued in the United States. From the "Continental note" to the "Greenback," and thence to the "Treasury note of 1890," was a long stretch of financial legislation.

The Continental Currency.

The issue of paper money by the Continental Congress was one of the necessities of the period during which the war for independence was being waged. It proved so costly, however, that not until a greater crisis than the Revolution had arisen was a Government issue of legal tender paper money emitted. Some \$200,000,000 of Continental currency was issued between 1775 and 1780, and all of it was retired without the formality of redemption. After the first year of issue this currency steadily depreciated, until in 1781 one thousand dollars' worth of paper money was worth only one dollar in specie. "Then," as Mr. Jefferson writes, "it expired without a single groan. Not a murmur was heard on this occasion among the people. On the contrary, universal congratulations took place on their seeing this gigantic mass, whose dissolution had threatened convulsions which should shake their infant confederacy to its centre, quietly interred in its grave." There is reason to believe that the Continental Congress never declared the currency to be a legal tender, although it did enact that anyone refusing to take the money should be deemed an enemy of his country. Nearly all the States, however, at the suggestion of Congress, made the Continental currency legal tender.

Issues of United States Notes.

The new Federal Government had been in existence twenty-three years before an issue of Government notes was authorized by Congress. On June 30, 1812, within two weeks after war had been declared with England, an act of Congress authoriz-

ing the issue of \$5,000,000 Treasury notes was approved by President Madison. These notes were payable one year after date, bore interest at 5½ per cent. per annum, and were to be issued "to such public creditors as chose to receive them at par." They were made receivable for all duties and taxes due the United States and for public lands. Various issues of Treasury notes were authorized by acts of Congress down to 1861, but in every case they were merely temporary loans, usually bearing interest and payable only to such persons "as chose to receive them." The various issues of non-legal tender Treasury notes are shown as follows:

Non-Legal Tender Treasury Note Issues, 1812-1861.

Authorizing Act.	Amount Issued.	Length of Loan.	Sold at.	Rate of Interest.	Remarks.
June 30, 1812	\$5,000,000	1 year.	Par.	5½%	
Feb. 25, 1813	5,000,000				
Mar. 4, 1814	10,000,000				
Dec. 26, 1814	8,318,400				
Feb. 24, 1815	4,969,400	Pleasure of Govt.	Par.	5½%	Denomi- } \$100 and over.
	3,392,994				
Oct. 12, 1837	10,000,000	1 year to 2 years.	Par.	None.	nations. } under \$100.
May 21, 1838	5,709,810				
Mar. 2, 1839	3,857,276				
Mar. 31, 1840	7,114,251				
Feb. 15, 1841	7,529,062				
Jan. 31, 1842	7,939,995				
Aug. 31, 1842	3,025,555				
Mar. 3, 1843	1,806,950				
July 22, 1846	7,687,800	1 to 2 yrs.	Par.	½ to 5½%	Total issue, \$47,002,900.
Jan. 28, 1847	26,122,100				
Dec. 28, 1857	52,778,900				
Dec. 17, 1860	10,010,900				
Mar. 2, 1861	22,468,100	2 years.	Par@1.27% prem.	6%	
	12,896,350				
July 17, 1861	60,030,000	Demand.	Par.	None.	Old demand notes.
Aug. 5, 1861					
Feb. 12, 1862					
July 17, 1861.	139,999,750	3 years.	100% prem.	7½%	"7-30's" of 1861.

Legal Tender Notes (Greenbacks).

For nearly fifty years, from 1812 to 1861, at various times Congress had authorized the issue of Treasury notes, but not until after the latter year were such notes made a legal tender. A bankrupt treasury, an impaired credit, and a civil war of unparalleled proportions made desperate measures necessary, and there was scarcely a financier in 1861 who did not consider the proposed issue of legal tender notes a desperate undertaking, justified only, if at all, by the law of self-preservation, which operates in behalf of nations as well as individuals. The first "legal tender" act was approved February 25, 1862. It authorized the issue of \$150,000,000 non-interest-bearing notes, payable to bearer, in denominations of not less than \$5, and legal tender in payment of all debts, public and private, except duties on imports and interest on the public debt. These notes were made exchangeable for 6 per cent. bonds and receivable for loans that might thereafter be made by the Government. Supplementary acts of July 11, 1862, and March 3, 1863, authorized additional issues of \$150,000,000 each, in denominations of not less than one dollar, and the time in which to exchange the notes for bonds was limited to July 1, 1863. The act of March 3, 1863, superseded a joint resolution of January 17, 1863. It was under these acts that the legal tender notes known as "greenbacks," now outstanding, were issued. The legal tender issues during the war period were:

Authorizing Act.	Amount Authorized.	Amount Issued.	Length of Loan.	Sold at.	Rate of Interest.
Feb. 25, 1862	\$150,000,000	\$449,338,902*	Indefinite.	Par.	None
July 11, 1862	150,000,000				
Mar. 3, 1863	150,000,000				
Mar. 3, 1863	400,000,000	44,520,000†	1 year.	Par.	5%
		166,480,000†	2 years.	Par.	5%
		266,595,440†	3 years.	Par.	6% compound.

* Highest amount outstanding at any one time, January 30, 1864. Amount outstanding since May 31, 1878, \$346,681,016.

† Includes reissues.

The one year and two year 5 per cent. notes of 1863, and the 6 per cent. compound interest notes of 1863, were legal tender for only their face value exclusive of interest, and were in a very short time retired from circulation by holders who kept them for an investment.

Redemption of Legal Tender Notes.

The retirement of the legal tender notes began soon after the war closed, and on April 12, 1866, an act of Congress authorized the Secretary of the Treasury to retire

and cancel not more than \$10,000,000 of notes within six months of the passage of the act and \$4,000,000 per month thereafter. About \$400,000,000 of notes were outstanding at that time.

On February 4, 1868, after \$44,000,000 were retired, an act of Congress, suspending the authority of the Secretary of the Treasury to retire and cancel United States notes, became a law without the approval of the President.

On March 18, 1869, an act "to strengthen the public credit" was passed, which declared that the United States notes were redeemable in coin. This act concluded as follows: "And the United States also solemnly pledges its faith to make provision at the earliest practicable period for the redemption of the United States notes in coin."

On January 14, 1875, the act "to provide for the resumption of specie payments" was passed. It provided for reducing the notes outstanding from \$382,000,000 to \$300,000,000. It declared that "on and after January 1, 1879, the Secretary of the Treasury shall redeem in coin the United States legal tender notes then outstanding, on their presentation for redemption at the office of the Assistant Treasurer of the United States in the City of New York, in sums of not less than fifty dollars." The same act provided that while the legal tender notes outstanding remained in excess of \$300,000,000, the Secretary of the Treasury should redeem such notes to the amount of 80 per cent. of the increase in national bank notes issued.

On May 31, 1878, an act was passed forbidding the further retirement of United States legal tender notes, and providing that "when any of said notes may be redeemed or be received into the Treasury under any law from any source whatever and shall belong to the United States, they shall not be retired, cancelled or destroyed, but they shall be reissued and paid out again and kept in circulation." When this act was passed there were \$346,681,016 of United States notes outstanding, and there has been no change in the amount since.

An act passed March 14, 1900, provides for the redemption of United States notes in gold coin but makes it the duty of the Secretary of the Treasury to reissue them in exchange for gold.

The Silver Policy of the Government.

From 1792 to 1853 the Government coined both gold and silver for anyone who presented the bullion for such purpose. The act of February 21, 1853, however, stopped the free coinage of fractional silver and empowered the Director of the Mint to purchase silver bullion for the Government, to be used in minting coins of a lower denomination than one dollar.

The act of February 12, 1873, stopped the coinage of the old standard silver dollar of 412½ grains and authorized the coinage of the trade dollar of 420 grains, for private individuals, making it a legal tender for \$5. The trade dollar was deprived

of its legal tender feature by joint resolution of July 22, 1876, and dropped from the list of coins March 3, 1887.

On February 28, 1878, an act of Congress (known as the Bland Act), passed over the veto of the President, restored the standard silver dollar of 412½ grains as a full legal tender coin, and directed the purchase by the Government of \$2,000,000 to \$4,000,000 worth of silver bullion per month for coinage into dollars. Holders of the coin were authorized to deposit the same with the United States Treasurer and to receive therefor certificates of deposit, known as silver certificates. These certificates are not legal tender, although receivable for customs, taxes, and all public dues, and are redeemable only in silver.

On July 14, 1890, a law (known as the Sherman Act) stopped the compulsory coinage of silver dollars, and increased purchases of silver bullion to 4,500,000 ounces per month against which Treasury notes, redeemable in gold or silver coin at the discretion of the Secretary of the Treasury, were authorized to be issued. These notes were made a legal tender in payment of all debts, public and private, and receivable for customs, taxes, and all public dues.

On November 1, 1893, that portion of the act of July 14, 1890, directing the purchase of 4,500,000 ounces of silver bullion per month and the issue of Treasury notes therefor was repealed. The repealing act declares it "to be the policy of the United States to continue the use of both gold and silver as standard money, and to coin both gold and silver into money of equal intrinsic and exchangeable value."

In the War Revenue Act of June 13, 1898, was incorporated a provision directing that all the silver bullion in the Treasury purchased under the act of July 14, 1890, should be coined into standard silver dollars to an amount not less than \$1,500,000 each month.

The "gold standard" act of March 14, 1900, made the gold dollar the standard unit of value, but declared that all forms of money, issued or coined by the United States, shall be maintained at par. It requires that the Treasury notes be cancelled as fast as the silver bullion in the Treasury is coined into silver dollars, and silver certificates issued against the silver dollars coined. It also authorizes the coinage into subsidiary coin of the bullion purchased under the act of 1890, as the Secretary of the Treasury may deem best, the total of such coin outstanding at any time not to exceed \$100,000,000.

Purchases of Silver.

During the greater part of twenty years, from February 12, 1873, to November 1, 1893, the Government was a large purchaser of silver bullion. Its purchases aggregated 496,984,889 ounces, at an aggregate cost of \$508,933,974.96. The silver was bought under four authorizing acts: (1) February 12, 1873, authorizing the coinage of the trade dollar; (2) January 14, 1875, the Resumption Act; (3) February 28, 1878, the Bland Act; and (4) July 14, 1890, the Sherman Act.

The Government purchases of silver under the acts of 1873, 1875, 1878, and 1890, were:

Act of	Fine Ounces.	Cost.	Average Price per Fine Ounce.	Bullion Value of a Silver Dollar.
February 12, 1873.....	5,434,282.00	\$7,152,564.00	\$1.3162	\$1.0180
January 14, 1875.....	31,603,906.00	37,571,148.00	1.1888	.9194
February 28, 1878.....	291,272,018.56	308,279,260.71	1.0583	.8185
July 14, 1890.....	168,674,682.53	155,931,002.25	.9244	.7150
Total	496,984,889.09	\$508,933,974.96	\$1.0240	.7920

Seigniorage on Silver Coinage.

As the Government values the coins it issues at \$1.2929+ per fine ounce, the difference between the price paid for the bullion and the par value of the coin becomes a profit, which is called the seigniorage. The magnitude of this profit to the Government may be inferred from the fact that while the total cost of the bullion purchased under the acts of 1878 and 1890 was \$464,210,263, the Government produced from that bullion \$493,417,743 of standard silver dollars and still had in the Treasury on June 30, 1900, 77,454,253 ounces of uncoined bullion which cost \$70,079,834.

The profit on the bullion purchased under the act of 1890 and coined to June 30, 1900, is shown as follows:

Year ended June 30.	Bullion Coined, Ounces.	Cost of Bullion.	Silver Dollars Coined.	Seigniorage.
1891.....	27,109,023.63	\$22,747,860.42	\$27,292,475	\$4,544,614.58
1892.....	2,669,128.95	2,577,838.19	3,450,995	873,156.81
1893.....	4,133,029.56	3,784,417.64	5,343,715	1,559,297.36
1894.....	586.27	530.99	758	227.01
1895.....	3,059,727.26	2,680,825.10	3,956,011	1,275,185.90
1896.....	5,801,417.00	5,173,085.04	7,500,822	2,327,736.96
1897.....	16,399,737.48	14,567,598.75	21,203,701	6,636,104.25
1898.....	7,736,525.15	6,928,821.41	10,002,780	3,073,958.59
1899.....	14,118,876.49	12,734,563.55	18,254,709	5,520,145.45
1900.....	*14,111,355.00	*12,728,000.00	18,244,984	*5,516,984.00
	89,139,406.79	\$83,923,539.09	\$115,250,950	\$31,327,410.91

* Approximate.

On June 30, 1900, there was 77,454,253.37 ounces of silver bullion, bought under the act of 1890, remaining in the Treasury. It cost \$70,079,834.30 and when coined will produce \$100,142,873, making the additional seigniorage \$30,063,039.

United States Mint and Coinage Acts.

By act of Congress of April 2, 1792, provision was made for the establishing of the United States Mint. The following coins were authorized: *Gold*—Eagle, half eagle and quarter eagle; *Silver*—Dollar, half dollar, quarter dollar, dime and half dime. Free coinage was established, and the ratio of gold to silver was fixed at 15 to 1. Gold coins were to be $\frac{11}{16}$ fine, of the weight of 27 grains to the dollar, 24.75 grains pure gold. Silver coins were to be $\frac{371}{1000}$ fine, of the weight of 416 grains to the dollar, 371 $\frac{1}{4}$ grains pure silver. Both gold and silver coins were made full legal tender.

The act of June 28, 1834, reduced the weight of gold coins to 25.8 grains standard and 23.2 grains pure, or nearly $\frac{9}{10}$ fine (0.899225). The ratio was 16.002 to 1.

The act of January 18, 1837, made the standard fineness of both gold and silver coins $\frac{9}{10}$. The standard weight of the gold coins was left unchanged at 25.8 grains, but the amount of pure gold was slightly increased from 23.20 grains to 23.22 grains. The standard weight of silver coin was reduced from 416 to 412 $\frac{1}{2}$ grains, but the amount of pure silver was left unchanged at 371 $\frac{1}{4}$ grains. This made the ratio 15.988+ to 1.

The act of March 3, 1849, authorized the coinage of the double eagle and gold dollar.

The act of March 3, 1851, authorized the coinage of the three-cent silver piece, to weigh 12 $\frac{3}{4}$ grains, $\frac{3}{4}$ fine.

The act of February 21, 1853, reduced the weight of fractional silver coins to 384 grains standard and 345.6 grains pure silver per dollar, and stopped the coinage of fractional silver for private individuals, the Director of the Mint being authorized to purchase the bullion required for such coinage. Fractional coins were made legal tender only to the amount of five dollars. The same act authorized the coinage of the three-dollar gold piece.

The act of March 3, 1853, increased the weight and fineness of the three-cent silver coins to the standard of other fractional silver coins, making it 11.52 grains standard and 10.368 grains pure.

The act of March 3, 1865, authorized the motto, "In God we trust," to be placed upon coins.

The act of February 12, 1873, which made the Mint a bureau of the Treasury Department and created the office of Director of the Mint, dropped the silver dollar, half dime and three-cent piece from the list of coins, and authorized the coinage of the trade dollar of 420 grains standard and 378 grains pure. The weight of fractional silver coins was increased to 25 grams, or 385.8 grains standard to the dollar or 347.22 grains pure. The gold dollar of 25.8 grains was made the unit of value.

The act of March 3, 1875, authorized the coinage of a twenty-cent silver piece of the same relative weight and fineness as the other fractional silver coins.

On July 22, 1876, a joint resolution was adopted by Congress depriving the trade dollar of its legal tender quality.

The act of February 28, 1878, restored the silver dollar of 412½ grains standard, 371¼ grains pure, to the list of coins, made it full legal tender, and authorized the purchase of from \$2,000,000 to \$4,000,000 worth of silver bullion monthly for coinage into silver dollars. This act was vetoed by President Hayes and passed over his veto.

The act of May 2, 1878, stopped the coinage of the twenty-cent silver piece.

The act of June 9, 1879, made all fractional silver coins a legal tender to the amount of ten dollars.

The act of March 3, 1887, authorized the redemption of trade dollars and directed that their coinage should cease.

The act of July 14, 1890, amended the act of February 28, 1878, and directed that silver bullion to the amount of 4,500,000 ounces should be purchased each month, and Treasury notes be issued therefor. The coinage of silver dollars was to cease after July 1, 1891, except as should be necessary to provide for the redemption of the Treasury notes.

The act of September 26, 1890, discontinued the coinage of the one dollar and three dollar gold pieces.

The act of August 5, 1892, authorized the coinage of silver half dollars of the legal weight and fineness, not to exceed \$2,500,000, to be known as Columbian half dollars, and to be paid to the World's Columbian Exposition. A special issue of Columbian quarter dollars was also authorized. These coins are legal tender to the amount of ten dollars.

The act of March 3, 1899, authorized the coinage of Lafayette dollars of the same weight and fineness as the standard silver dollar. The issue was limited to \$50,000.

The Gold Standard Act of March 14, 1900.

An act passed by Congress and approved by the President March 14, 1900, declares that the dollar consisting of 25.8 grains of gold, nine-tenths fine, shall be the standard unit of value, and all forms of money issued or coined by the United States shall be maintained at a parity of value with that standard.

It provides that United States notes and Treasury notes of 1890 shall be redeemed in gold coin when presented for redemption, and for this purpose a reserve fund of \$150,000,000 gold coin and bullion is to be maintained by the Secretary of the Treasury. When notes are redeemed they are to be exchanged for gold in the general fund, or for gold deposited at the Treasury or any Sub-Treasury, or used to purchase gold coin. Should the gold in the reserve fund fall below \$100,000,000, the Secretary of the Treasury is authorized to restore the same to \$150,000,000 by selling one year gold bonds, bearing interest at not over 3 per cent. per annum, the gold coin so obtained first to go into the general fund and then to be exchanged for

an equal amount of notes in the reserve fund. The notes so exchanged for gold may be used by the Secretary for any purpose except to meet deficiencies in the current revenues. Notes redeemed may be reissued, but must be held in the reserve fund until exchanged for gold. The gold and notes in the reserve fund must never exceed \$150,000,000.

The act declares that the legal tender quality of the silver dollar or of any other money of the United States is not affected.

Provision is made for the establishment of two divisions in the office of the United States Treasurer, to be called the "division of issue" and the "division of redemption," which shall have charge of the issue and redemption of notes and certificates.

As fast as the silver bullion in the Treasury is coined into silver dollars, the Secretary is required to cancel an equal amount of Treasury notes when received into the Treasury, and to issue silver certificates against the silver dollars so coined.

Gold certificates in denominations of not less than \$20 may be issued in exchange for deposits of gold coin. These certificates are receivable for customs, taxes and all public dues, and may be counted as a part of the lawful reserves of National banks. When the gold coin in the reserve fund shall fall and remain below \$100,000,000, the issue of gold certificates shall be suspended. When the aggregate amount of United States notes and silver certificates in the general fund shall exceed \$60,000,000, the Secretary may suspend the issue of gold certificates. One-fourth of all such certificates outstanding shall be in denominations of \$50 or less. The Secretary may issue certificates in denominations of \$10,000, payable to order.

The law authorizing the issue of currency certificates for Treasury notes deposited is repealed.

Silver certificates shall be issued in denominations of \$10 or under, except that 10 per cent. of the total volume may be in denominations of \$20, \$50 and \$100. Certificates of higher denominations than \$10 are to be retired and smaller denominations substituted, while a like volume of United States notes of less denomination than \$10 are to be retired and notes of \$10 and upward substituted therefor.

The Secretary is authorized to coin silver bullion in the Treasury into subsidiary coin, the total outstanding at any one time not to exceed \$100,000,000. Treasury notes equal in amount to the cost of the bullion contained in the subsidiary coin are to be canceled and not reissued.

The Secretary is directed to recoin all worn and uncurrent subsidiary coin that comes into the Treasury.

The act authorizes National banks with a capital of not less than \$50,000 to be organized in places having not to exceed 6,000 inhabitants, and with not less than \$25,000 in places of 3,000 inhabitants. In a city with a population exceeding 50,000 persons the minimum capital is \$200,000. In all other places the minimum is \$100,000.

The Secretary of the Treasury is authorized to refund the 5 per cent. bonds of 1904, the 4 per cent. bonds of 1907, and the 3 per cent. bonds of 1908, into 2 per cent. 30 year bonds, principal and interest payable in gold coin, the exchange to be made at a valuation of the old bonds not greater than their present worth, to yield an income of $2\frac{1}{2}$ per cent. per annum.

National banks are authorized to take out circulation to the amount of par of the Government bonds deposited to secure circulation, not to exceed the amount of capital stock actually paid in. Not more than one-third of the circulating notes of any bank shall be of the denomination of \$5. The National banks are authorized to exchange bonds on deposit to secure circulation for the new 2 per cent. bonds. The act of July 12, 1882, prohibiting a National bank which deposits lawful money to retire circulation from receiving any increase of circulation for six months thereafter is repealed.

The tax on circulation based on new 2 per cent. bonds is reduced to one-quarter of 1 per cent., payable semi-annually.

The last section of the law says: That the provisions of this act are not intended to preclude the accomplishment of international bimetalism whenever conditions shall make it expedient and practicable to secure the same by concurrent action of the leading commercial nations of the world, and at a ratio which shall insure permanence of relative value between gold and silver.

Coinage of the United States Mints, 1793-1900.

Since the United States Mint was established to July 1, 1900, there have been coined in the United States \$2,166,188,113 gold and \$796,171,133 silver, as follows:

Period.	Number Years.	Gold.	Silver Dollars.	Subsidiary Silver.	Total Silver.
1793-1877....	85	\$1,010,900,324	\$8,031,238	\$182,855,223	*\$222,585,921
1878-1900....	22½	1,155,287,789	490,464,977	78,803,771	†\$573,585,212
1793-1900....	107½	\$2,166,188,113	\$498,496,215	\$261,658,994	\$796,171,133

* Includes \$31,699,460 Trade Dollars.

† Includes \$4,266,404 Trade Dollars, and \$50,000 Lafayette Dollars.

There have been six different denominations of gold coin authorized at various times, as follows: \$20, \$10, \$5, \$3, \$2.50 and \$1, but only four are now minted, the \$3 and \$1 pieces having been dropped. Of the silver coins eight denominations have been coined: Dollar of 412½ grains, trade dollar of 420 grains, fifty cents, twenty-five cents, twenty cents, dimes, half dimes and three cents. The trade dollar, twenty cent, half dimes and three cent silver pieces are no longer coined. Five denominations of minor coins have been executed, half cent, one cent, two cents, three cents, and five cents. Only the one and five cent pieces are now coined.

Gold Coins of the United States.

Denominations.	Coinage commenced.	Amount Coined from 1793 to June 30, 1900.	Standard Weight, grains.	Weight prior to 1834, grains.	Abrasion allowed, in grains.	Least Current Weight in grains.	Unless artificially reduced should continue current.
Double eagle..	1850	\$1,537,926,060	516.	....	2.58	513.42	50 yrs.
Eagle.....	1795	319,061,160	258.	270.	1.29	256.71	35 yrs.
Half eagle....	1795	259,066,545	129.	135.	0.64	128.36	20 yrs.
Three dollars.	1854	1,619,376	77.4	....	0.38	77.02	....
Quarter eagle.	1796	29,015,635	64.5	67.5	0.32	64.18	15 yrs.
Dollars.....	1849	19,499,337	25.8	....	0.13	25.67	....

All Gold Coins of the United States are worth their face value in pure gold. The alloy is never reckoned.

Silver Coins of the United States.

Denominations.	Coinage commenced.	Coinage ceased.	Amount Coined from 1793 to June 30, 1900.	Standard Weight, grains.	Amount for which a Legal Tender.
Standard dollars.....	1878	....	\$498,496,215.00	412.5	Unlimited.
Trade dollars.....	1873	1878	35,965,924.00	420.	Not a legal tender.
Dollars.....	1794	1873	8,031,238.00	412.5	Unlimited.
Half dollars.....	1794	....	144,988,509.00	192.9	Ten dollars.
Lafayette dollars.....	1900	....	50,000.00	412.5	....
Columbian half dollars.	1892	1893	2,501,052.50	192.9	Ten dollars.
Quarter dollars.....	1796	....	63,763,021.50	96.45	Ten dollars.
Columbian quar. dollars	1893	1893	10,005.75	96.45	Ten dollars.
Twenty cents.....	1875	1878	271,000.00	77.16	Five dollars.
Dimes.....	1796	....	35,931,861.20	38.58	Ten dollars.
Half dimes.....	1795	1873	4,880,219.40	19.29	Five dollars.
Three cents.....	1851	1873	1,282,087.20	11.52	Five dollars.

Weight and Fineness of Coins and Standard Bullion.

An ounce of gold 1000 fine is worth \$20.671834†.

An ounce of silver 1000 fine is worth (coining value) \$1.292929†.

All American gold and silver coins are $\frac{9}{10}$, or .900 fine.

A gold dollar weighs 25.8 grains, $\frac{9}{10}$ pure gold, or 23.22 grains.
 A pound sterling weighs 123.274+ grains, $\frac{11}{12}$ pure gold, or 113.0016+ grains.
 A pound sterling is worth \$4.8665635287+.

One ounce of silver, English standard, is .925 fine=444 grains pure silver.
 " " American " " .900 " =432 " " "
 " " "fine" " " 1.000 " =480 " " "

A silver dollar of the United States weighs 412 $\frac{1}{2}$ grains .900 fine, and contains 371.25 grains pure silver.

A dollar of fractional silver weighs 25 grams=385.80 grains, .900 fine, and contains 347.22 grains pure silver.

One hundred dollars in gold coin weighs 5.375 ozs. troy= .368 lbs. avoirdupois.
 " " silver dollars " 85.9375 " " =5.892 " "
 " " subsidiary silver coin " 80.375 " " =5.511 " "

An English shilling weighs 87.273 grains $\frac{925}{1000}$ fine, and contains 80.729 grains pure silver.

The alloy in gold coin of the United States is pure silver and copper.

The alloy in the silver coin of the United States is pure copper.

The pure gold in gold coins of the United States is worth the face value of the coin.

The five cent minor coin is 75 % copper and 25 % nickel.

The one cent minor coin is 95 % copper and 5 % tin and zinc.

Minor Coins of the United States.

Denominations.	Coinage commenced.	Coinage ceased.	Amount Coined from 1793 to June 30, 1900.	Standard Weight, grains.	No allowance for Abrasion.	Amount for which a Legal Tender.	Deviation allowed in Coinage, in grains.
Five cents..	1866	....	\$17,967,308.00	77.16	No allowance for Abrasion.	Twenty-five cents.	2
Three cents.	1865	1889	941,349.48	30.		Twenty-five cents.	4
Two cents..	1864	1872	912,020.00	96.		Twenty-five cents.	4
Cents	1793	....	13,633,366.03	48.		Twenty-five cents.	4
Half cents..	1793	1857	39,926.11	....		Not a legal tender.	....

Postal and Fractional Currency.

The scarcity of "small change" during the war, caused by the disappearance of fractional silver, led to the use of postage stamps and of metallic tokens issued by individuals. Congress took the hint, and provided for the issue of a paper currency in denominations of less than \$1, known first as postal currency and afterwards as fractional currency. The highest amount authorized was \$50,000,000 and the highest

amount outstanding at any time was \$49,102,660.27. The different issues were as follows:

Act of Congress.	Series.	Amount issued.	Issue began.	Issue ceased.	Denominations, cts.
July 17, 1862	First	\$20,215,635.00	Aug. 21, 1862	Sept. 21, 1866	5, 10, 25, 50
Mar. 3, 1863	Second	23,164,483.65	Oct. 10, 1863	Feb. 23, 1867	5, 10, 25, 50
June 30, 1864	Third	86,115,028.80	Dec. 5, 1864	April 16, 1869	3, 5, 10, 15, 25, 50
" "	Fourth	176,567,032.00	July 14, 1869	Feb. 16, 1875	10, 15, 25, 50
" "	Fifth	62,661,900.00	Feb. 25, 1874	Feb. 15, 1876	10, 25, 50
Total issue.....		\$368,724,079.45			

The act of June 30, 1864, was amended by acts of March 3, 1865, April 7 and May 16, 1866. The amount reported by the Government as outstanding, June 30, 1900, was \$6,878,990.41. An additional amount of \$8,375,934, by act of June 21, 1879, is estimated as lost or destroyed.

Denominations of Notes.

The only United States notes (legal tender) known as "greenbacks" now issued are of the series of 1880, although there are still outstanding some of the series of 1878, 1875, 1874, 1869, and prior to the last mentioned year. The denominations outstanding run from \$1 to \$10,000, but no \$5,000 or \$10,000 United States notes have been issued since 1883. The act of March 14, 1900, provides when silver certificates of higher denomination than \$10 are cancelled and lower denominations substituted, U. S. notes of less than \$10 shall be cancelled and higher denominations substituted.

The Treasury notes of 1890 (legal tender) are issued in denominations of \$1 to \$1,000. The act of March 14, 1900, provides for their retirement.

The currency certificates, which are issued in place of United States notes deposited in the U. S. Treasury, are of the series of 1875, a few of the series of 1872 still being outstanding. They were issued in denominations of \$5,000 and \$10,000.

Gold certificates are issued under acts of July 12, 1882, series of 1882 and 1888, and March 14, 1900. A few certificates issued under act of March 3, 1863, are unredeemed. The series of 1882 are in denominations of \$20 to \$10,000, and series of 1888 are for \$5,000 and \$10,000 only. One-fourth of the total issue must be for \$50 or less.

Silver certificates have been issued of the series of 1878, 1880, 1886, 1891, 1896 and 1899, but none of the series of 1878 are now printed. Certificates of series of 1878 and 1880 are of the denominations of \$10 to \$1,000, and of 1886 and 1891 \$1 to \$20. The act of March 14, 1900, limits issue to denominations of \$10 and under, but 10 per cent. of total outstanding may be in denominations of \$20, \$50 and \$100.

National bank notes were originally issued in denominations of \$5 to \$500. In 1865 the denominations of \$1, \$2 and \$1,000 were added. The issue of \$1 and \$2 bank notes stopped in 1879, and of \$500 and \$1,000 notes in 1885, but some notes of each denomination are still outstanding. Under act of March 14, 1900, no National bank can have more than one-third of its total notes in denomination of \$5.

The denominations of the various issues of paper money are shown as follows :

United States Notes.	Treasury Notes of 1890.	Currency Certificates.	Gold Certificates.	Silver Certificates.	National Bank Notes.
\$1	\$1	....	....	\$1	*\$1
2	2	....	....	2	*2
5	5	....	....	5	5
10	10	....	....	10	10
20	20	....	\$20	20	20
50	50	....	50	50	50
100	100	....	100	100	100
500	....	....	500	500	*500
1,000	1,000	....	1,000	1,000	*1,000
*5,000	....	\$5,000	5,000	....	....
*10,000	....	10,000	10,000	....	....

* Issue has ceased.

The Legal Tender Functions of Coin and Paper.

Gold coin is a legal tender in all payments, without any limit as to amount. It is not redeemable by the Government.

The silver dollar of the acts of 1792, 1837 and 1878, is a full legal tender to any amount. It is not redeemable. The trade dollar was a legal tender to the amount of five dollars, but has no legal tender qualifications now.

All fractional silver coin now minted is a legal tender to the amount of ten dollars. Redeemable in lawful money in sums or multiples of \$20 at the Treasury or any Sub-Treasury.

Minor coin is a legal tender to the amount of twenty-five cents. Redeemable in lawful money in sums or multiples of \$20 at the Treasury or any Sub-Treasury.

United States notes ("greenbacks") are a legal tender in payment of all debts, public and private, except for duties on imports and interest on the public debt. Redeemable in gold coin at Treasury or Sub-Treasuries.

Gold certificates are not a legal tender, but may be issued in payment of interest on the public debt, and are receivable in payment for customs, taxes, and all public dues. National banks may count them as part of their lawful reserves. Redeemable in gold coin at Treasury or Sub-Treasuries.

Silver certificates are not a legal tender, but are receivable for customs, taxes, and all public dues. Redeemable only in silver dollars.

Currency certificates are not a legal tender for any purpose, but were formerly counted as part of lawful money reserve of banks, and accepted in settlement of clearing house balances. They are now being retired under the act of March 14, 1900.

United States Treasury notes of 1890 are a legal tender in payment of all debts, public and private, and are receivable for customs, taxes, and all public dues. They

may be counted as a part of the lawful reserves of the banks, and are redeemable in gold or silver coin in the discretion of the Secretary of the Treasury. Redeemable in gold coin at Treasury or Sub-Treasuries.

National bank notes are not a legal tender except that they are receivable for all dues to the United States, except duties on imports, and for all debts and demands owing by the United States, except interest on the public debt and in redemption of the National currency. Each National bank is required to receive at par, for any debt or liability to it, the notes of every other National bank. Redeemable in lawful money at the Treasury only, and at the bank of issue.

Legends on Notes.

United States Note (Greenback).—*Face* : This note is a legal tender for — dollars; the United States will pay the bearer — dollars. *Back* : This note is a legal tender at its face value for all debts, public and private, except duties on imports and interest on the public debt.

United States Treasury Note of 1890.—*Face* : Treasury note; the United States of America will pay to bearer — dollars in coin. *Back* : This note is a legal tender at its face value in payment of all debts, public and private, except when otherwise expressly stipulated in the contract.

Gold Certificate.—*Face* : This certifies that there have been deposited in the Treasury of the United States — dollars in gold coin, repayable to the bearer on demand.

Silver Certificate.—*Face* : This certifies that there have been deposited in the Treasury of the United States — silver dollars, payable to the bearer on demand. *Back* : This certificate is receivable for customs, taxes, and all public dues, and when so received may be reissued.

Currency Certificate.—*Face* : Certificate of Deposit; it is hereby certified that — dollars have been deposited with the Assistant Treasurer of the United States, payable in United States notes on demand at his office. To — National Bank. *Back* : (Endorsement) : Pay only to any bank, member of the — Clearing House Association.

National Bank Note.—*Face* : National Currency; this note is secured by bonds of the United States deposited with the U. S. Treasurer at Washington (signed by the Register of the Treasury and the Treasurer of the United States). The — National Bank of — will pay — dollars to bearer on demand. (Signed by the president and cashier of the bank). *Back* : This note is receivable at par in all parts of the United States in payment of all taxes and excises, and all other dues to the United States except duties on imports, and also for all salaries and other debts and demands owing by the United States to individuals, corporations and associations within the United States, except interest on public debt.

Government Paper Currency in Circulation.

The Government is responsible for the redemption of five classes of currency which it has issued: (1) Legal tender notes issued during the Civil War as promissory notes; (2) Treasury notes of 1890, issued in the purchase of silver bullion; (3) Currency certificates issued for legal tender notes deposited with the Government; (4) Gold certificates issued for gold deposited, and (5) Silver certificates issued for silver deposited. The amounts of Government paper money outstanding on June 30, yearly since 1878, were:

June 30.	Legal Tender Notes.	Treasury Notes, 1890.	Currency Certificates.	Gold Certificates.	Silver Certificates.	Total Government paper.
1878	\$274,660,895	....	\$46,245,000	\$24,897,680	7,080	\$345,810,655
1879	272,289,112	....	29,355,000	15,279,820	414,480	317,338,412
1880	313,660,457	....	14,235,000	7,963,900	5,789,569	341,648,926
1881	316,476,924	....	11,650,000	5,759,520	39,110,729	373,997,173
1882	312,010,427	....	13,245,000	5,029,020	54,506,090	384,799,537
1883	310,182,177	....	13,060,000	59,807,370	72,620,686	455,670,233
1884	306,497,214	....	12,190,000	71,146,640	96,427,011	486,260,865
1885	301,633,637	....	29,585,000	126,729,730	101,530,946	559,479,313
1886	305,562,699	....	18,250,000	76,044,375	88,116,225	487,973,299
1887	317,897,219	....	8,770,000	91,225,437	142,118,017	560,010,673
1888	294,282,812	....	14,415,000	119,887,370	200,387,376	628,972,558
1889	300,344,931	....	16,735,000	116,792,759	257,102,445	690,975,135
1890	323,046,826	....	11,830,000	131,380,019	297,210,043	763,466,888
1891	323,714,272	\$40,463,165	21,365,000	120,850,399	307,364,148	813,756,984
1892	311,814,840	98,051,657	29,830,000	141,235,339	326,880,803	907,812,639
1893	320,875,683	140,661,694	11,935,000	92,970,019	326,489,165	892,931,561
1894	268,772,371	134,862,009	58,935,000	66,344,409	327,094,381	856,008,170
1895	265,109,456	115,978,708	55,405,000	48,381,566	319,731,752	804,606,485
1896	225,451,358	95,217,361	31,840,000	42,320,759	331,259,509	726,088,987
1897	248,583,578	83,905,197	61,130,000	37,285,919	358,336,368	789,241,062
1898	286,572,329	98,665,580	26,045,000	35,820,639	390,659,080	837,762,628
1899	310,547,349	92,605,792	20,855,000	32,656,269	401,869,343	858,533,753
1900	316,614,114	75,247,497	3,705,000	200,555,469	408,499,347	1,004,621,427

Gold Reserves Held Against Paper Issues.

The gold actually owned by the Government is to be determined by deducting from the gross amount in the Treasury the amount of gold certificates outstanding, and the net will be the reserve which the Government holds. The silver certificates are the only Government issue of paper money redeemable solely in silver. Of the other issues, the currency certificates are redeemable in United States notes; United

States notes and Treasury notes of 1890 were redeemable in coin, either gold or silver, but the act of March 19, 1900, makes them redeemable in gold coin. The ratio of Treasury gold reserves to paper money redeemable in gold in the discretion of the Secretary of the Treasury is shown as follows:

June 30.	Total Paper Redeemable in Gold.	Total Gold in United States Treasury.	Total Gold Reserve. Per Cent.	Paper Redeemable in Gold, less Gold Certificates.	Net Gold in United States Treasury.	Gold Reserve for Paper Redeemable in Gold other than Gold Certificates. Per Cent.
1878	\$345,803,575	\$128,460,203	36.1	\$320,905,895	\$103,562,523	32.3
1879	316,923,932	135,236,475	42.7	301,644,112	119,956,655	39.8
1880	335,859,357	126,145,427	37.6	327,895,457	118,181,527	36.4
1881	333,886,444	163,171,661	48.9	328,126,924	157,412,141	48.0
1882	330,284,447	148,506,390	44.9	325,255,427	143,477,370	44.1
1883	383,049,547	198,078,568	51.7	323,242,177	138,271,198	42.8
1884	389,833,854	204,876,594	52.5	318,687,214	133,729,954	42.0
1885	457,948,367	247,028,625	54.0	331,218,637	120,298,895	36.6
1886	399,857,074	232,838,124	58.3	323,812,699	156,793,749	48.4
1887	417,892,656	278,101,106	66.5	326,667,219	186,875,669	57.2
1888	428,585,182	313,753,617	73.2	308,697,812	193,866,247	62.8
1889	433,872,690	303,504,320	70.0	317,079,931	186,711,561	58.9
1890	466,256,845	321,612,423	69.0	334,876,826	190,232,404	56.8
1891	506,392,836	238,518,122	47.1	385,842,437	117,667,723	30.5
1892	580,931,836	255,577,706	44.0	439,696,497	114,342,367	26.0
1893	566,442,396	188,455,433	33.3	473,472,377	95,485,414	20.2
1894	528,913,789	131,217,434	24.8	462,569,380	64,873,025	14.0
1895	484,874,733	155,893,932	32.2	436,493,164	107,512,363	24.6
1896	394,829,478	144,020,364	36.5	352,508,719	101,699,605	28.8
1897	430,904,694	178,076,657	41.3	393,618,775	140,790,738	35.8
1898	447,103,548	202,825,049	45.4	411,282,909	167,004,410	40.6
1899	456,664,410	273,393,480	59.9	424,008,141	240,737,211	56.8
1900	596,122,080	421,112,654	72.1	395,566,611	220,557,185	55.7

On January 14, 1875, an act was passed providing for the resumption of specie payments on January 1, 1879. This is known as the Resumption Act. It authorized the Secretary of the Treasury to sell bonds to provide coin for the redemption of notes. The Secretary obtained \$96,000,000 gold in this way, and it was held as a reserve in the Treasury. This reserve was not recognized by any act of Congress until July 12, 1882, when a section was incorporated in a bank act declaring that whenever the gold in the Treasury in excess of the gold certificates outstanding falls below \$100,000,000 the issue of gold certificates shall cease.

Since the resumption of specie payments on January 1, 1879, the Government has kept a reserve of \$100,000,000 gold to protect the issue of United States Treasury

notes aggregating \$346,681,016, except during the period between March, 1893, and February, 1896. In January, 1895, the reserve fell to \$44,000,000. Between February, 1894, and February, 1896, the Government sold \$262,000,000 of bonds to obtain gold to replenish the reserve.

The Act of March 14, 1900, provides for maintaining a gold reserve of \$150,000,000, but the prohibition as to the issue of gold certificates does not apply until the gold coin in the reserve falls below \$100,000,000. Gold certificates cannot be issued except for gold actually deposited, and such deposits must be held exclusively for the redemption of the certificates so issued.

Total Paper Currency and Metallic Reserves.

The total issue of Government paper money, including all certificates, but excluding National Bank notes, with the gross amount of gold and silver (silver dollars and bullion) in the Treasury, and the ratio of reserves to currency outstanding are shown as follows:

June 30.	* Paper Currency in Circulation.	Secured by Coin and Bullion in United States Treasury.		Ratio to Paper Currency in Circulation.		
		Gold.	Silver.	Gold. Per Cent.	Silver. Per Cent.	Total Metallic Reserve.
1878	\$345,810,655	\$128,460,203	\$15,059,828	37.1	4.3	41.4
1879	317,338,412	135,236,475	33,239,917	42.6	10.5	53.1
1880	341,648,926	126,145,427	49,549,851	36.9	14.5	51.4
1881	372,997,173	163,171,661	65,854,671	43.7	17.6	61.3
1882	384,790,537	148,506,390	90,384,724	38.6	23.5	62.1
1883	455,670,233	198,078,568	116,396,235	43.5	25.5	69.0
1884	486,260,865	204,876,594	139,616,414	42.1	28.7	70.8
1885	559,479,313	247,028,625	169,451,998	44.1	30.3	74.4
1886	687,973,299	232,838,124	184,354,764	47.7	37.8	85.5
1887	560,010,673	278,101,106	222,401,405	49.6	39.7	89.4
1888	628,972,558	313,753,617	254,499,241	49.9	40.5	90.4
1889	690,975,135	303,504,320	289,688,374	43.9	41.9	85.8
1890	763,466,888	321,612,423	323,909,360	42.1	42.4	84.5
1891	813,756,984	238,518,122	379,705,279	29.2	46.8	75.6
1892	907,812,639	255,577,706	433,858,402	28.2	47.4	76.0
1893	892,931,561	188,455,433	480,476,527	21.1	53.8	74.9
1894	856,008,170	131,217,434	495,409,178	15.3	57.9	73.2
1895	804,606,485	155,893,932	495,785,906	19.4	61.6	81.0
1896	726,088,987	144,020,364	497,667,738	19.8	68.5	88.3
1897	789,241,062	178,076,657	504,583,579	22.6	63.9	86.5
1898	837,762,628	202,825,049	502,932,225	24.2	60.0	84.2
1899	858,533,753	273,393,480	502,157,729	31.8	58.5	90.3
1900	1,004,621,427	421,112,654	500,215,576	41.9	49.8	91.7

* National bank notes not included.

Gold and Silver in the United States Treasury.

The total holdings of gold and silver by the Government at the close of each fiscal year since 1878 are shown in the table below. First is given the gross gold, including coin and bullion, and then the net gold, after deducting the amount of gold certificates in circulation. The gross amount of silver dollars and bullion in the Treasury is next shown, and then the net, after deducting the silver certificates outstanding. The Treasury notes issued since August 13, 1890, for the purchase of silver bullion, are not deducted from the silver in the Treasury, as the notes are not certificates of deposit redeemable in silver, the same as the silver certificates, but are Treasury notes, the same as the old legal tenders. To the net silver dollars and bullion is added the subsidiary silver in the Treasury, which gives the total net silver.

June 30.	Total Gold Coin and Bullion.	Gold, less Certificates Outstanding.	Total Silver Dollars and Bullion.	Silver Dollars and Bullion less Certificates Outstanding.	Subsidiary Silver.	Total Net Silver.	Ratio Net Silver to Gold. Per Cent.
1878	\$128,460,203	\$103,562,523	\$15,059,828	\$15,052,748	\$6,860,506	\$21,913,254	21.1
1879	135,236,475	119,956,655	33,239,917	32,825,437	8,903,401	41,728,838	34.8
1880	126,145,427	118,181,527	49,549,851	43,760,282	24,350,482	68,110,764	57.8
1881	163,171,661	157,412,141	65,854,671	26,743,942	27,247,697	53,991,639	34.3
1882	148,506,390	143,477,370	90,384,724	35,878,634	28,048,631	63,927,265	44.5
1883	198,078,568	138,271,198	116,396,235	43,775,549	28,486,001	72,261,550	52.3
1884	204,876,594	133,729,954	139,616,414	43,189,403	29,600,720	72,790,123	54.4
1885	247,028,625	120,298,895	169,451,998	67,921,052	31,236,899	99,157,951	82.4
1886	232,838,124	156,793,749	184,345,764	96,229,539	28,904,682	125,134,221	79.8
1887	278,101,106	186,875,669	222,401,405	80,283,388	26,977,494	107,260,882	57.4
1888	313,753,617	193,866,247	254,499,241	54,111,865	26,051,741	80,163,606	41.3
1889	303,504,320	186,711,561	289,688,374	32,585,929	25,129,733	57,715,662	30.9
1890	321,612,423	190,234,404	323,909,360	26,699,317	22,805,226	49,504,543	26.0
1891	238,518,122	117,667,723	379,705,279	72,341,131	19,656,695	91,997,826	78.2
1892	255,577,706	114,342,367	433,858,402	106,977,599	14,224,714	121,202,313	106.0
1893	188,455,433	95,485,414	480,476,527	153,987,362	11,855,944	165,843,306	173.7
1894	131,217,434	64,873,025	495,409,178	168,314,797	17,889,531	186,204,328	287.0
1895	155,893,932	107,512,363	495,785,906	176,054,154	16,552,845	192,606,999	179.1
1896	144,020,364	101,699,605	497,667,738	166,408,229	15,739,976	182,139,205	179.8
1897	178,076,657	140,790,738	504,583,579	146,247,211	16,210,344	162,457,555	115.4
1898	202,825,049	167,004,410	502,932,225	112,273,145	12,097,682	124,370,827	74.5
1899	273,393,480	240,737,211	502,157,729	100,288,386	6,070,497	106,358,883	44.2
1900	421,112,654	220,557,185	500,215,576	91,716,229	6,606,973	98,323,202	44.5

Gold and Silver in Circulation in the United States.

The total gold and silver in circulation in the United States is given below. The Treasury notes of 1890 are not included in the total for silver, although set forth in the table, as they are based upon silver bullion in the treasury.

June 30.	Gold Coin.	Gold Certificates.	Total Gold.	Silver Dollars.	Silver Certificates.	Treasury Notes of 1890.	Subsidiary Silver.	Total Silver.	Ratio Silver to Gold.
									Per Cent.
1878	\$84,739,774	\$24,897,680	\$109,637,454	\$855,143	\$7,080	....	\$64,918,322	\$65,780,545	60.0
1879	110,505,362	15,270,830	125,776,192	7,653,649	414,480	....	67,346,584	75,414,713	60.0
1880	245,695,779	7,063,900	252,759,679	19,309,435	5,789,569	....	54,511,788	79,610,792	34.1
1881	315,312,877	5,759,630	321,072,507	38,827,983	39,110,729	....	52,830,364	120,778,076	37.6
1882	358,251,325	5,029,020	363,280,345	31,990,994	54,506,090	....	52,579,940	138,577,003	38.2
1883	344,633,495	59,807,370	404,440,865	35,341,880	72,620,686	....	52,474,299	160,436,865	39.7
1884	340,624,203	71,146,040	411,770,243	39,794,913	96,437,011	....	45,660,896	181,882,732	44.2
1885	341,608,411	126,729,730	468,338,141	38,471,269	101,530,946	....	43,702,921	183,705,136	39.2
1886	357,936,337	70,044,375	427,980,712	52,469,720	88,116,225	....	46,156,256	186,742,290	43.0
1887	376,419,249	91,225,437	467,644,686	55,506,147	142,118,017	....	46,570,305	246,194,469	52.6
1888	392,066,854	119,387,370	511,454,224	53,545,393	200,387,376	....	50,354,635	306,287,314	59.8
1889	376,055,482	116,792,759	492,848,241	54,417,967	237,102,445	....	51,476,834	362,997,246	73.6
1890	374,396,381	131,890,019	506,286,400	56,166,326	237,210,043	....	54,069,743	407,446,142	80.6
1891	408,073,806	120,850,390	528,924,205	57,083,041	307,364,148	\$40,463,165	58,290,924	423,338,118	80.0
1892	408,767,740	141,235,339	550,003,079	56,739,484	326,880,893	98,051,637	62,386,518	446,066,805	81.1
1893	403,693,700	92,570,019	496,263,719	57,029,749	326,489,163	140,661,694	65,400,398	448,919,176	90.4
1894	497,873,990	66,344,400	564,218,390	51,191,377	327,094,381	344,892,009	58,233,344	486,519,102	77.4
1895	490,275,057	48,381,569	538,656,626	51,983,162	319,731,752	115,978,708	60,219,718	481,934,632	81.7
1896	456,128,453	42,320,759	498,449,212	52,175,998	331,250,509	95,217,361	59,999,805	443,435,312	89.0
1897	519,146,675	37,285,919	556,432,594	62,001,302	358,386,368	83,905,197	59,228,540	469,566,110	84.4
1898	660,559,880	35,820,639	696,380,519	67,229,731	390,650,680	98,065,280	64,328,747	512,242,618	73.5
1899	702,060,459	32,656,392	734,716,851	63,381,751	401,869,343	92,605,792	70,673,682	535,928,776	72.9
1900	614,918,391	300,555,469	915,473,860	66,429,476	408,499,347	75,247,497	76,294,050	551,222,873	67.6

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Coin and Paper in Circulation in the United States.

The following table shows the total amount of money in circulation outside of the United States Treasury. It includes the money held in banks. The "Government paper" includes all the classes of notes and certificates issued by the Government. These with the National bank notes make up the total paper money. The gold and silver coin figures represent the gold coin, silver dollars and fractional silver coin in actual circulation. The table shows the relative proportion of coin and paper in actual use as money in the hands of the people.

June 30.	Government Paper.	National Bank Notes.	Total Paper.	Gold and Silver Coin.	Total Circulation (coin and paper.)	Ratio to Total Circulation.	Per Cent.
1878	\$345,810,655	\$310,129,887	\$655,940,542	\$150,513,239	\$806,453,781	81.3	18.7
1879	317,338,412	320,675,372	638,013,784	185,505,595	823,519,379	77.5	22.5
1880	341,648,926	336,800,651	678,449,577	299,517,002	977,966,579	69.4	30.6
1881	372,997,173	349,320,733	722,317,906	396,980,224	1,119,298,130	64.5	35.5
1882	384,790,537	351,275,317	736,065,854	442,622,238	1,178,688,092	62.4	37.6
1883	455,670,233	347,855,146	803,525,379	432,469,674	1,235,995,053	65.0	35.0
1884	486,260,865	329,882,621	816,143,486	426,079,924	1,242,223,410	65.7	34.3
1885	559,479,313	306,911,370	866,390,683	423,842,601	1,290,233,284	67.2	32.8
1886	487,973,299	304,476,475	792,449,774	456,562,312	1,249,012,086	63.4	36.6
1887	560,010,673	276,554,488	836,565,161	480,495,681	1,317,060,842	63.5	36.5
1888	628,972,558	245,149,720	874,122,278	497,966,792	1,372,089,070	63.7	36.3
1889	690,975,135	207,039,352	898,014,487	481,950,283	1,379,964,770	65.1	34.9
1890	763,466,888	181,396,823	944,863,711	484,632,480	1,429,496,191	66.1	33.9
1891	813,756,984	161,922,040	975,679,024	524,047,771	1,499,726,795	65.1	34.9
1892	907,812,639	167,306,957	1,075,119,596	527,953,742	1,603,073,338	67.1	32.9
1893	892,931,561	174,731,139	1,067,662,700	526,063,711	1,593,726,411	67.0	33.0
1894	856,008,170	200,754,351	1,056,762,521	607,293,711	1,664,061,232	63.5	36.5
1895	804,606,485	207,047,546	1,011,654,031	592,477,937	1,604,131,968	63.1	36.9
1896	726,088,987	215,331,927	941,420,914	568,304,286	1,509,725,200	62.4	37.6
1897	789,241,062	226,410,767	1,015,651,829	630,376,417	1,646,028,246	61.7	38.3
1898	837,762,628	223,129,703	1,060,892,331	782,543,418	1,843,435,749	57.5	42.5
1899	858,533,753	237,832,594	1,096,366,347	836,117,892	1,932,484,239	56.7	43.3
1900	1,004,621,427	300,161,552	1,304,782,979	757,642,517	2,062,425,496	63.3	36.7

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Total Supply of Gold and Silver in the United States.

The total amount of gold and silver in use as money in the United States is shown in the table below. It includes all coin in actual circulation and the coin and bullion held in the United States Treasury:

June 30.	Gold Coin and Bullion.	Silver Dollars and Bullion.	Fractional Silver Coin.	Total Silver Coin and Bullion.	Total Gold and Silver.	Ratio Sil- ver to Gold. Per Cent.
1878	\$213,199,977	\$15,914,971	\$71,778,828	\$87,693,799	\$300,893,776	41.1
1879	245,741,837	40,893,566	76,249,985	117,143,551	362,885,388	47.7
1880	351,841,206	68,859,286	78,862,270	147,721,556	499,562,762	42.0
1881	478,484,538	94,682,654	80,087,061	174,769,715	653,254,253	36.5
1882	506,757,715	122,375,688	80,428,580	202,804,268	709,561,983	40.0
1883	542,732,063	151,738,115	80,960,300	232,698,415	775,430,478	42.9
1884	545,500,797	179,411,327	75,261,528	254,672,855	800,173,652	46.7
1885	588,697,036	207,923,267	74,939,820	282,863,087	871,560,123	48.0
1886	590,774,461	236,815,484	75,060,937	311,876,421	902,650,882	52.8
1887	654,520,335	277,907,552	75,547,799	353,455,351	1,007,975,686	54.0
1888	705,820,471	310,044,544	76,406,376	386,450,920	1,092,271,391	54.7
1889	679,559,801	344,106,342	76,606,567	420,712,909	1,100,272,710	61.9
1890	696,008,805	380,075,716	76,874,969	456,950,685	1,152,959,490	65.7
1891	646,591,928	437,388,320	77,947,619	515,335,939	1,161,927,867	79.7
1892	604,345,446	490,657,886	76,611,232	567,269,118	1,231,614,564	85.4
1893	592,089,133	537,506,270	77,256,212	614,762,482	1,206,851,615	103.8
1894	629,091,424	546,600,555	76,122,875	622,723,430	1,251,814,854	99.0
1895	636,168,989	547,769,068	76,772,563	624,541,631	1,260,710,620	98.2
1896	600,148,847	549,843,736	75,730,781	625,574,517	1,225,723,364	104.2
1897	697,223,332	556,584,781	75,438,884	632,023,665	1,329,246,997	90.7
1898	863,784,929	560,192,016	76,421,429	636,613,445	1,500,398,374	73.7
1899	975,453,939	565,539,480	76,746,179	642,285,659	1,617,739,598	65.9
1900	1,036,031,645	566,645,052	82,901,023	649,546,075	1,685,577,720	62.7

General Stock of Coin and Paper Money in the United States.

The total stock of money in the United States, as shown below, is arrived at by excluding all certificates, as they merely represent an equivalent amount of coin or bullion in the Treasury. The Treasury notes are also excluded, as they were issued for silver bullion purchased by the Government and are being retired as fast as the bullion is coined into silver dollars and silver certificates issued to take their place:

June 30.	United States Notes.	National Bank Notes.	Total Paper.	Gold and Silver Coin and Bullion.	Total Stock of Money.	Ratio to Total Stock. Paper. Per Ct.	Coin. Per Ct.
1878	\$346,681,016	\$322,919,810	\$669,600,826	\$300,893,776	\$970,494,602	69.0	31.0
1879	346,681,016	328,962,073	675,643,089	362,885,388	1,038,528,477	65.1	34.9
1880	346,681,016	343,890,901	690,571,917	499,562,762	1,190,134,679	58.0	42.0
1881	346,681,016	354,617,115	701,298,131	653,254,253	1,354,552,384	51.8	48.2
1882	346,681,016	357,552,564	704,233,580	709,561,983	1,413,795,563	49.8	50.2
1883	346,681,016	359,072,208	702,753,224	775,430,478	1,478,183,702	47.5	52.5
1884	346,681,016	338,692,612	685,373,628	800,173,652	1,485,547,280	46.1	53.9
1885	346,681,016	316,857,081	663,538,097	871,560,123	1,535,098,220	43.2	56.8
1886	346,681,016	308,510,891	655,191,907	902,650,882	1,557,842,789	42.1	57.9
1887	346,681,016	278,917,073	625,598,089	1,007,975,686	1,633,573,775	38.3	61.7
1888	346,681,016	252,203,941	598,884,957	1,092,271,391	1,691,156,348	35.4	64.6
1889	346,681,016	211,197,683	557,878,699	1,100,272,710	1,658,151,409	33.6	66.4
1890	346,681,016	185,748,590	532,429,606	1,152,959,490	1,685,389,096	31.6	68.4
1891	346,681,016	167,577,214	514,258,230	1,161,927,867	1,676,186,097	30.7	69.3
1892	346,681,016	172,683,850	519,364,866	1,231,614,564	1,750,979,430	29.7	70.3
1893	346,681,016	178,713,872	525,394,888	1,206,851,615	1,732,246,503	30.3	69.7
1894	346,681,016	207,353,244	554,034,260	1,251,814,854	1,805,849,114	30.7	69.3
1895	346,681,016	211,691,035	558,372,051	1,260,710,620	1,819,082,671	30.7	69.3
1896	346,681,016	226,000,547	572,681,563	1,225,723,364	1,798,404,927	31.8	68.2
1897	346,681,016	231,441,686	578,122,702	1,329,246,997	1,907,369,699	30.3	69.7
1898	346,681,016	227,900,177	574,581,193	1,500,398,374	2,074,979,567	27.7	72.3
1899	346,681,016	241,350,871	588,031,887	1,617,739,598	2,205,771,485	26.7	73.3
1900	346,681,016	309,640,444	656,321,460	1,685,577,720	2,341,899,180	28.0	72.0

Gold and Silver.

The existence and use of gold and silver may be said to be co-extensive with the life of man. The earliest historical records speak of the precious metals as though they had always been. Their use as money has been from time immemorial, and no other metal so well meets the requirements of value, convenience and durability. How much of gold and silver has been produced in all the ages, or how much there is above ground in all the quarters of the globe it is impossible to estimate, even approximately. In the broad field of conjecture there have been many workers, not a few of them earnest, patient and careful delvers of fact, yet their best efforts have produced only guesses, and they have frankly confessed it.

Estimates of gold and silver production, which cover a period anterior to the beginning of the present century, must from necessity be largely conjectural, while it is only since 1848, when the great gold discovery in the United States startled the world, that records reasonably accurate have been preserved. A favorite starting point with the speculative investigator is 1492, or the discovery of America. Dr. Soëtbeer of Göttingen, an eminent authority, estimates the world's production of gold from 1493 to 1850 at about 153,000,000 ounces, and of silver at about 4,800,000,000 ounces. Dr. Soëtbeer's estimate in kilograms, and reduced to ounces, is as follows:

Production of Gold and Silver, 1493-1850.

Periods. Years.	Number of Years.	Weight in Kilograms.		Weight in Ounces.	
		Gold.	Silver.	Gold.	Silver.
1493-1600.....	108	754,800	22,835,000	24,270,000	734,239,000
1601-1700.....	100	912,300	37,234,000	29,334,000	1,197,227,000
1701-1800.....	100	1,900,100	57,035,000	61,096,000	1,833,910,000
1801-1850.....	50	1,184,900	32,724,000	38,100,000	1,052,211,000
1493-1850.....	358	4,752,100	149,828,000	152,800,000	4,817,587,000

Since 1851 the world's production of gold has been nearly 320,000,000 ounces, or more than double the estimated production for the previous 358 years, and of silver about 3,800,000,000 ounces, or nearly as much as in the previous 250 years. The estimated yearly production of gold and silver in the world and in the United States, with the ratio of silver to gold produced since 1850, is shown as follows:

Production of Gold and Silver, 1851-1900.

	World's Production.		United States' Production.		Ratio World's Production of Silver to Gold.
	Gold Ounces.	Silver Ounces.	Gold Ounces.	Silver Ounces.	
1851.....	5,800,000	31,100,000	2,661,000	40,000	5.36 to 1
1852.....	6,420,000	31,300,000	2,902,000	40,000	4.87 "
1853.....	7,520,000	31,300,000	3,144,000	40,000	4. " "
1854.....	6,165,000	31,300,000	2,902,000	40,000	5.08 "
1855.....	6,530,000	31,300,000	2,661,000	40,000	4.79 "
1856.....	7,140,000	31,400,000	2,661,000	40,000	4.40 "
1857.....	6,447,000	41,400,000	2,661,000	40,000	4.87 "
1858.....	6,030,000	31,400,000	2,419,000	387,000	5.21 "
1859.....	6,040,000	31,500,000	2,419,000	77,000	5.22 "
1860.....	6,486,000	29,095,000	2,225,000	116,000	4.49 "
1861.....	5,950,000	35,402,000	2,080,000	1,547,000	5.95 "
1862.....	5,950,000	35,402,000	1,896,000	3,480,500	5.95 "
1863.....	5,950,000	35,402,000	1,935,000	6,574,300	5.95 "
1864.....	5,950,000	35,402,000	2,230,000	8,507,800	5.95 "
1865.....	5,950,000	35,402,000	2,575,000	8,701,200	5.95 "
1866.....	6,270,000	43,052,000	2,588,000	7,734,400	6.88 "
1867.....	6,270,000	43,052,000	2,502,000	10,441,400	6.88 "
1868.....	6,270,000	43,052,000	2,322,000	9,281,300	6.88 "
1869.....	6,270,000	43,052,000	2,395,000	9,281,300	6.88 "
1870.....	6,270,000	43,052,000	2,419,000	12,375,500	6.88 "
1871.....	5,591,000	63,317,000	2,104,000	17,789,100	11.33 "
1872.....	5,591,000	63,317,000	1,741,500	22,236,300	11.33 "
1873.....	4,053,700	63,267,200	1,741,500	27,650,000	13.00 "
1874.....	4,390,000	55,300,800	1,620,500	28,849,900	12.60 "
1875.....	4,716,600	62,261,700	1,615,700	24,518,000	13.20 "
1876.....	5,016,500	67,753,100	1,930,100	30,009,000	13.51 "
1877.....	5,512,200	62,679,900	2,268,800	30,783,000	11.37 "
1878.....	5,761,100	73,385,500	2,476,800	34,960,000	12.74 "
1879.....	5,262,200	74,383,500	1,881,800	31,550,000	14.13 "
1880.....	5,148,900	74,795,300	1,741,500	30,320,000	14.53 "
1881.....	4,983,700	79,020,900	1,678,600	33,260,000	15.85 "
1882.....	4,934,100	86,472,100	1,572,200	36,200,000	17.53 "
1883.....	4,614,600	89,175,000	1,451,250	25,730,000	19.32 "
1884.....	4,921,200	81,567,800	1,489,950	27,800,000	16.59 "
1885.....	5,245,600	91,610,000	1,538,300	39,910,000	17.47 "
1886.....	5,135,700	93,297,300	1,693,100	39,440,000	18.16 "
1887.....	5,116,900	96,123,600	1,596,400	41,260,000	18.79 "

	World's Production.		United States' Production.		Ratio World's Production of Silver to Gold.
	Gold Ounces.	Silver Ounces.	Gold Ounces.	Silver Ounces.	
1888.....	5,330,800	108,827,600	1,604,800	45,780,000	20.41 to 1
1889.....	5,973,800	120,213,600	1,587,000	50,000,000	20.12 "
1890.....	5,749,300	126,095,100	1,588,900	54,500,000	21.93 "
1891.....	6,320,200	137,171,000	1,604,800	58,330,000	21.70 "
1892.....	7,094,300	153,151,800	1,596,400	63,500,000	21.56 "
1893.....	7,618,800	165,472,600	1,739,300	60,000,000	21.72 "
1894.....	8,764,400	164,610,400	1,910,800	49,500,000	18.78 "
1895.....	9,615,800	167,501,000	2,254,800	55,727,000	17.42 "
1896.....	9,783,900	157,061,400	2,568,100	58,835,000	16.05 "
1897.....	11,552,500	164,073,200	2,774,900	53,860,000	14.20 "
1898.....	13,904,400	165,295,600	3,118,400	54,438,000	11.88 "
1899 (approximate).....	15,500,000	165,000,000	3,447,000	55,295,000	10.65 "

Imports and Exports of Gold and Silver.

June 30.	Gold.		June 30.	Gold.		June 30.	Silver.	
	Exp.	\$		Imp.	\$		Exp.	\$
1864.....	Exp.	\$89,484,865	1864.....	Exp.	\$6,133,261	1864.....	Exp.	\$9,464,203
1865.....	"	51,882,805	1865.....	Exp.	18,250,640	1865.....	"	11,456,481
1866.....	"	63,001,048	1866.....	Imp.	18,213,804	1866.....	"	17,203,006
1867.....	"	22,001,761	1867.....	Exp.	22,208,842	1867.....	"	11,660,912
1868.....	"	63,658,901	1868.....	Imp.	33,209,414	1868.....	"	9,036,313
1869.....	"	21,870,930	1869.....	"	25,558,083	1869.....	"	12,634,280
1870.....	"	21,579,012	1870.....	Exp.	49,667,427	1870.....	"	18,011,033
1871.....	"	59,802,647	1871.....	"	4,331,149	1871.....	"	13,840,945
1872.....	"	40,831,302	1872.....	"	68,130,087	1872.....	"	4,564,109
1873.....	"	36,174,268	1873.....	"	495,873	1873.....	"	12,855,473
1874.....	"	14,539,283	1874.....	"	87,506,403	1874.....	"	17,544,067
1875.....	"	53,284,184	1875.....	"	4,528,942	1875.....	"	37,164,713
1876.....	"	23,184,341	1876.....	"	30,083,721	1876.....	"	27,084,107
1877.....	"	344,140	1877.....	"	78,884,882	1877.....	"	31,764,484
1878.....	Imp.	4,125,760	1878.....	Imp.	44,653,200	1878.....	"	31,413,411
1879.....	"	1,037,334	1879.....	"	104,985,283	1879.....	"	24,177,458
1880.....	"	77,119,371	1880.....	"	51,432,517	1880.....	"	25,643,999
1881.....	"	97,466,127	1881.....	Exp.	5,436,772	1881.....	"	21,475,578
1882.....	"	1,789,174	1882.....	"		1882.....	"	

NOTE.—Since June 30, 1894, gold and silver in ore have been included in the statement of specie movements. Prior to that date they were reported in merchandise.

From 1843 to 1863 the United States exported net about \$450,000,000 of coin and bullion. During that period the exports of domestic gold and silver were not sepa-

ately stated, but both were included under the head of silver. Nearly \$520,000,000 of domestic silver appears thus to have been exported, although considerably less than \$20,000,000 represented the total product of the silver mines of the country. The total net exports of \$450,000,000 may therefore be safely assumed to have been gold. The net movement of gold and silver to and from the United States each year since 1863 is given above.

Ratio of Silver to Gold.

The ratio at which gold and silver are coined in the United States is 15.988 to 1—that is, 15.988 ounces of silver are treated as worth 1 ounce of gold. In England the ratio is 14.287 to 1, and in France 15½ to 1. The ratio of silver to gold prior to the Christian era, so far as can be ascertained from ancient records, ranged from 14 to 1 in Greece about 340 B. C. to 8.93 to 1 in Rome 58 to 49 B. C. From the beginning of the Christian era to the discovery of America the ratio was from 10.50 to 1 to 14.40 to 1, and from 1492 to 1700 from 10.50 to 1 to 15.40 to 1. From 1700 to 1850 the commercial ratio of silver to gold ranged from 14.14 to 1 in 1760 to 16.25 to 1 in 1813. The ratio since 1850 has been as follows:

1851....	15.46	1863....	15.37	1875....	16.59	1887....	21.13
1852....	15.59	1864....	15.37	1876....	17.88	1888....	21.99
1853....	15.33	1865....	15.44	1877....	17.22	1889....	22.10
1854....	15.33	1866....	15.43	1878....	17.94	1890....	19.76
1855....	15.38	1867....	15.57	1879....	18.40	1891....	20.92
1856....	15.38	1868....	15.59	1880....	18.05	1892....	23.72
1857....	15.27	1869....	15.60	1881....	18.16	1893....	26.49
1858....	15.38	1870....	15.57	1882....	18.19	1894....	32.56
1859....	15.19	1871....	15.57	1883....	18.64	1895....	31.60
1860....	15.29	1872....	15.63	1884....	18.57	1896....	30.66
1861....	15.50	1873....	15.92	1885....	19.41	1897....	34.20
1862....	15.35	1874....	16.17	1886....	20.78	1898....	35.03
						1899....	34.36

The Price of Silver.

The price of silver is made in London, and is quoted for an ounce of silver English standard, which is .925 fine, and contains 444 grains of pure silver. The American standard ounce is .900 fine, and contains 432 grains of pure silver. The "fine" ounce is, of course, 1000 fine, and contains 480 grains of pure silver. The American silver dollar is 412½ grains standard, or 371¼ grains pure, and the dollar of fractional silver 385.8 grains standard, or 347.22 grains pure. To make the bullion value of a silver dollar equal to the par value, silver would have to be quoted at 59 pence per

ounce English standard, making the fine ounce worth \$1.2929+, and the American standard ounce worth \$1.164+. The following table shows the value of the three different standard ounces and of the silver dollar and a dollar of subsidiary silver coin at different prices ranging from 30 to 59 pence in London, and also at one penny and fractions thereof:

Pence.	English ounce, 444 grains, Cents.	American ounce, 432 grains, Cents.	Fine ounce, 480 grains, Cents.	Silver dollar, 371½ grains, Cents.	Subsidiary silver, 347.22 grains, Cents.
25	50.6934	49.3233	54.8037	42.3872	39.6436
26	52.7211	51.2962	56.9958	44.0827	41.2293
27	54.7489	53.2692	59.1880	45.7782	42.8151
28	56.7761	55.2421	61.3801	47.4737	44.4008
29	58.8043	57.2150	63.5723	49.1692	45.9866
30	60.8320	59.1880	65.7644	50.8646	47.5723
31	62.8598	61.1609	67.9565	52.5601	49.1580
32	64.8875	63.1338	70.1487	54.2556	50.7438
33	66.9152	65.1067	72.3408	55.9511	52.3295
34	68.9430	67.0797	74.5330	57.6466	53.9153
35	70.9707	69.0526	76.7251	59.3421	55.5010
36	72.9985	71.0255	78.9172	61.0376	57.0868
37	75.0262	72.9985	81.1094	62.7330	58.6725
38	77.0539	74.9714	83.3015	64.4285	60.2582
39	79.0817	76.9443	85.4937	66.1240	61.8440
40	81.1094	78.9172	87.6858	67.8195	63.4297
41	83.1371	80.8902	89.8780	69.5150	65.0155
42	85.1649	82.8631	92.0701	71.2105	66.6012
43	87.1926	84.8360	94.2623	72.9060	68.1870
44	89.2203	86.8090	96.4544	74.6015	69.7727
45	91.2481	88.7819	98.6466	76.2970	71.3585
46	93.2758	90.7548	100.8387	77.9924	72.9442
47	95.3035	92.7278	103.0308	79.6880	74.5300
48	97.3313	94.7007	105.2230	81.3834	76.1157
49	99.3590	96.6736	107.4151	83.0789	77.7014
50	101.3867	98.6466	109.6073	84.7744	79.2872
51	103.4145	100.6195	111.7994	86.4699	80.8729
52	105.4422	102.5924	113.9916	88.1654	82.4587
53	107.4699	104.5654	116.1837	89.8608	84.0444
54	109.4977	106.5383	118.3759	91.5563	85.6301
59	119.6364	116.4029	129.3366	100.0338	93.5859

Values based on one penny sterling and fractions thereof:

Penny.	English ounce, 444 grains, Cents.	American ounce, 432 grains, Cents.	Fine ounce, 480 grains, Cents.	Silver dollar, 371½ grains, Cents.	Subsidiary silver, 347.22 grains, Cents.
1-16	0.126.733	0.123.308	0.137.009	0.105.968	0.099.109
1/8	0.253.467	0.246.616	0.274.018	0.211.936	0.198.218
3-16	0.380.200	0.369.925	0.411.027	0.317.904	0.297.327
1/4	0.506.934	0.493.233	0.548.036	0.423.872	0.399.436
5-16	0.633.667	0.616.541	0.685.046	0.529.840	0.495.545
3/8	0.760.401	0.739.849	0.822.055	0.635.808	0.594.654
7-16	0.887.134	0.863.157	0.959.064	0.741.776	0.693.763
1/2	1.013.867	0.986.466	1.096.073	0.847.744	0.792.872
9-16	1.140.601	1.109.774	1.233.082	0.953.712	0.891.981
5/8	1.267.334	1.233.082	1.370.091	1.059.680	0.991.090
11-16	1.394.068	1.356.390	1.507.100	1.165.648	1.090.199
3/4	1.520.801	1.479.698	1.644.109	1.271.616	1.189.308
13-16	1.647.535	1.603.007	1.781.118	1.377.584	1.288.417
7/8	1.774.268	1.726.315	1.918.128	1.483.552	1.387.525
15-16	1.901.001	1.849.623	2.055.137	1.589.520	1.486.634
1	2.027.735	1.972.931	2.192.146	1.695.488	1.585.743

From the above the bullion value may be calculated at any price without trouble. As, for instance, if silver were quoted in London at 27 7-16 pence, the value of a silver dollar and of a dollar of fractional silver would be as follows:

	Silver Dollar.	Dollar of Subsidiary Silver.
27 pence	45.7782 cents.	42.8151 cents.
7-16 " .....	.7418 "	.6938 "
27 7-16	46.5200	43.5089 "

The bullion value of a silver dollar, with silver quoted in London at 27 7-16 pence per ounce, is 46.52 cents, and of one dollar of fractional silver, 43.51 cents.

Bullion Value of Silver Dollars at Average Price of Silver.

Calendar Year.	Value.	Calendar Year.	Value.	Calendar Year.	Value.	Calendar Year.	Value.	Calendar Year.	Value.
1873....	\$1.004	1879....	\$.869	1885....	\$.823	1890....	\$.809	1895....	\$.505
1874....	.989	1880....	.885	1886....	.760	1891....	.764	1896....	.522
1875....	.961	1881....	.876	1887....	.758	1892....	.674	1897....	.467
1876....	.900	1882....	.878	1888....	.727	1893....	.604	1898....	.456
1877....	.929	1883....	.858	1889....	.723	1894....	.491	1899....	.464
1878....	.892	1884....	.861						

Finesness of Gold Expressed in Thousandths and in Carats.*

500 fine, 12.00 Carats	630 fine, 15.04 Carats	760 fine, 18.08 Carats	890 fine, 21.11 Carats
510 " 12.08 "	640 " 15.11 "	770 " 18.15 "	900 " 21.19 "
520 " 12.15 "	650 " 15.19 "	780 " 18.23 "	910 " 21.27 "
530 " 12.23 "	660 " 15.27 "	790 " 18.31 "	920 " 22.02 "
540 " 12.31 "	670 " 16.03 "	800 " 19.07 "	930 " 22.10 "
550 " 13.07 "	680 " 16.10 "	810 " 19.14 "	940 " 22.18 "
560 " 13.14 "	690 " 16.18 "	820 " 19.22 "	950 " 22.25 "
570 " 13.22 "	700 " 16.25 "	830 " 19.29 "	960 " 23.01 "
580 " 13.29 "	710 " 17.01 "	840 " 20.05 "	970 " 23.09 "
590 " 14.05 "	720 " 17.09 "	850 " 20.13 "	980 " 23.17 "
600 " 14.13 "	730 " 17.17 "	860 " 20.20 "	990 " 23.24 "
610 " 14.20 "	740 " 17.24 "	870 " 20.28 "	1000 " 24.00 "
620 " 14.28 "	750 " 18.00 "	880 " 21.04 "	

* The Carat is subdivided into thirty-two parts, and the fractions above are thirty-seconds, not hundredths, thus: 120 fine=12½ carats.

Value of One Ounce Troy of Gold at Different Degrees of Finesness.

100 fine....	\$10.33.6	630 fine.	\$13.02.3	760 fine.	\$15.71.1	890 fine.	\$18.39.8
110 " " " "	10.54.3	640 " " " "	13.23.	770 " " " "	15.91.7	900 " " " "	18.60.5
120 " " " "	10.74.9	650 " " " "	13.43.7	780 " " " "	16.12.4	910 " " " "	18.81.1
130 " " " "	10.95.6	660 " " " "	13.64.3	790 " " " "	16.33.1	920 " " " "	19.01.8
140 " " " "	11.16.3	670 " " " "	13.85.	800 " " " "	16.53.7	930 " " " "	19.22.5
150 " " " "	11.36.9	680 " " " "	14.05.7	810 " " " "	16.74.4	940 " " " "	19.43.1
160 " " " "	11.57.6	690 " " " "	14.26.3	820 " " " "	16.95.1	950 " " " "	19.63.8
170 " " " "	11.78.3	700 " " " "	14.47.	830 " " " "	17.15.8	960 " " " "	19.84.5
180 " " " "	11.99.	710 " " " "	14.67.7	840 " " " "	17.36.4	970 " " " "	20.05.2
190 " " " "	12.19.6	720 " " " "	14.88.4	850 " " " "	17.57.1	980 " " " "	20.25.8
200 " " " "	12.40.3	730 " " " "	15.09.0	860 " " " "	17.77.8	990 " " " "	20.46.5
210 " " " "	12.61.	740 " " " "	15.29.7	870 " " " "	17.98.4	1000 " " " "	20.67.2
220 " " " "	12.81.7	750 " " " "	15.50.4	880 " " " "	18.19.1		

N. B.—When there is an intermediate degree of finesness, a short calculation is necessary. For every one thousandth, add 2.07 cents per ounce for gold. Thus, one ounce of gold at 992 fine=\$20.50.6.

Prices of Silver in London, 1833-1900.

Calendar Year.	Lowest Quota- tion. Pence.	Highest Quota- tion. Pence.	Average Quota- tion. Pence.	Average Value of Fine Ounce Dollars.	Calendar Year.	Lowest Quota- tion. Pence.	Highest Quota- tion. Pence.	Average Quota- tion. Pence.	Average Value o. Fine Ounce Dollars.
1833	58¾	59½	59 3-16	1.297	1867	60¾	61¼	60 9-16	1.328
1834	59¾	60¾	59 15-16	1.313	1868	60¾	61¼	60¾	1.326
1835	59¾	60	59 11-16	1.308	1869	60	61	60 7-16	1.325
1836	59¾	60¾	60	1.315	1870	60¾	60¾	60 9-16	1.328
1837	59	60¾	59 9-16	1.305	1871	60 3-16	61	60¾	1.326
1838	59½	60¾	59½	1.304	1872	59¾	61½	60 5-16	1.322
1839	60	60¾	60¾	1.323	1873	57¾	59 15-16	59¾	1.298
1840	60¾	60¾	60¾	1.323	1874	57¾	59¾	58 5-16	1.278
1841	59¾	60¾	60 1-16	1.316	1875	55½	57¾	56¾	1.246
1842	59¾	60	59 7-16	1.303	1876	46¾	58¾	52¾	1.156
1843	59	59¾	59 3-16	1.297	1877	53¾	58¾	54 13-16	1.201
1844	59¾	59¾	59½	1.304	1878	49½	55¾	52 9-16	1.152
1845	58¾	59¾	59¾	1.298	1879	48¾	53¾	51¼	1.123
1846	59	60¾	59 5-16	1.300	1880	51¾	52¾	52¾	1.145
1847	58¾	60¾	59 11-16	1.308	1881	50¾	52¾	51 15-16	1.138
1848	58½	60	59½	1.304	1882	50	52¾	51 13-16	1.136
1849	59	60	59¾	1.309	1883	50	51 3-16	50¾	1.110
1850	59½	61½	61 1-16	1.316	1884	49½	51¾	50¾	1.113
1851	60	61½	61	1.337	1885	46¾	50	48 9-16	1.0645
1852	59¾	61¾	60¾	1.326	1886	42	47	45¾	0.9946
1853	60¾	61¾	61½	1.348	1887	43¾	47¾	44¾	0.97823
1854	60¾	61¾	61½	1.348	1888	41¾	44 9-16	42¾	0.93974
1855	60	61¾	61 5-16	1.344	1889	42	44¾	41 11-16	0.93512
1856	60½	62¾	61 5-16	1.344	1890	43¾	54¾	47¾	1.04633
1857	61	62¾	61¾	1.353	1891	43¾	48¾	45 1-16	0.98782
1858	60¾	61¾	61 5-16	1.344	1892	37¾	43¾	39¾	0.87106
1859	61¾	62¾	62 1-16	1.360	1893	30¾	38¾	35 9-16	0.78031
1860	61¾	62¾	61 11-16	1.352	1894	27	31¾	28¾	0.63479
1861	60¾	61¾	60 13-16	1.333	1895	27 3-16	31¾	29 13-16	0.65406
1862	61	62½	61 7-16	1.346	1896	29¾	31 15-16	30¾	0.67437
1863	61	61¾	61¾	1.345	1897	23¾	29 13-16	27 9-16	0.60483
1864	60¾	62½	61¾	1.345	1898	25	28¾	26 15-16	0.59010
1865	60¾	61¾	61 1-16	1.338	1899	26¾	29	27 7-16	0.60154
1866	60¾	62¾	61¾	1.339					

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